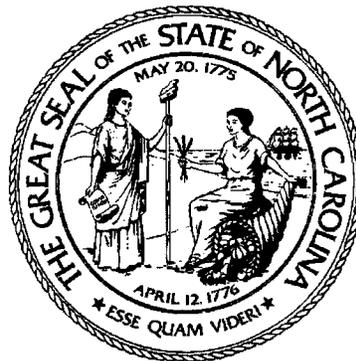


**JOINT LEGISLATIVE  
JOINING OUR BUSINESSES AND SCHOOLS (JOBS)  
STUDY COMMISSION**



***FINAL REPORT TO THE  
JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE  
AND TO THE  
2012 SESSION OF THE 2011  
GENERAL ASSEMBLY  
OF NORTH CAROLINA***

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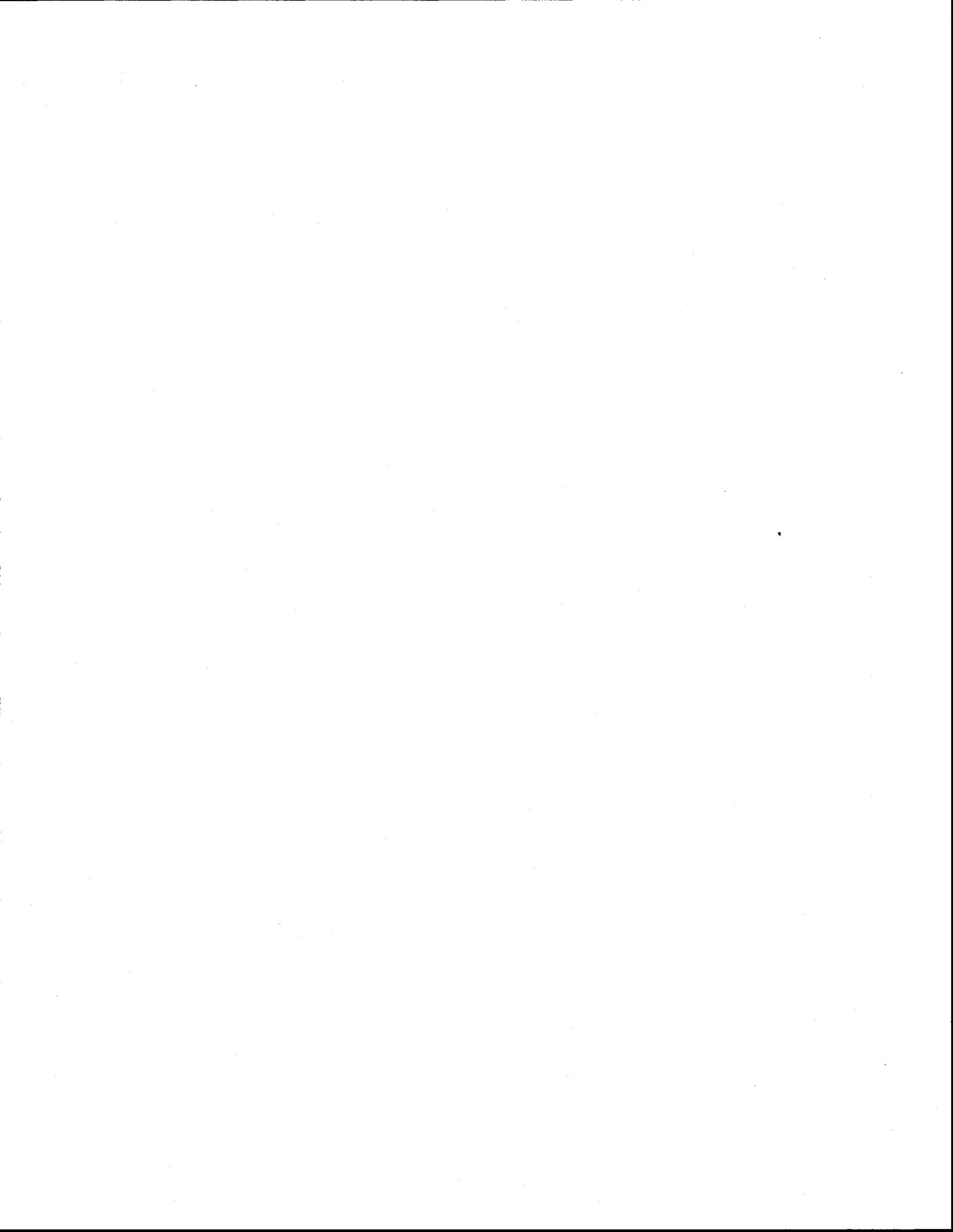
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STATE OF NORTH CAROLINA

JOINT LEGISLATIVE JOINING OUR BUSINESSES AND SCHOOLS (JOBS)  
STUDY COMMISSION



May 15, 2012

TO THE MEMBERS OF THE JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE  
AND THE 2012 SESSION OF THE 2011 GENERAL ASSEMBLY OF NORTH CAROLINA:

Attached for your consideration is the final report to the Joint Legislative Education Oversight Committee and the 2012 Session of the 2011 General Assembly of North Carolina. This report was prepared by the Joint Legislative Joining Our Businesses and Schools (JOBS) Study Commission pursuant to S.L. 2009-339.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Walter Dalton".

Lt. Governor Walter Dalton  
Chair



**JOINT LEGISLATIVE JOINING OUR BUSINESSES AND SCHOOLS  
(JOBS) STUDY COMMISSION  
2010-2011**

**COMMISSION MEMBERSHIP**

**Ex Officio Members**

Lt. Governor Walter H. Dalton (Chair)  
Hon. Howard N. Lee, Executive Director of the Education Cabinet

**President Pro Tempore Appointments**

Sen. Harry Brown (Vice Chair)  
Sen. Bob Rucho  
Sen. Dan Soucek  
Mr. Robert J. Beichner  
Ms. Valeria Lee  
Mr. Mike Murphy  
Ms. Felicia Gray Watson  
Ms. Laura Willoughby

**Speaker of the House of Representatives  
Appointments**

Rep. Nelson Dollar (Vice Chair)  
Rep. David R. Lewis  
Rep. Tom Murray  
Ms. Laura Carpenter Bingham  
Mr. Grant Godwin  
Ms. Caroline Watts McCullen  
Dr. Susan R. Purser  
Mr. Roger Shackelford

**Governor's Appointments**

Dr. William C. Harrison  
Ms. Pamela B. Townsend

Upon the initiative of the Chair, the following persons were asked to attend the meetings and provide advice to the Commission.

Mr. Joe Freddoso  
Dr. Tony Habit  
Sen. Fletcher Hartsell  
Dr. Sam Houston  
Mr. Karl Rectanus

**COMMISSION STAFF**

Kara McCraw  
Drupti Chauhan

Ted Harrison, Commission Assistant



**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2009**

**SESSION LAW 2009-339  
SENATE BILL 1069**

**AN ACT TO ESTABLISH THE JOINT LEGISLATIVE JOINING OUR BUSINESSES  
AND SCHOOLS (JOBS) STUDY COMMISSION.**

Whereas, the Innovative Education Initiatives Act became law in 2003; and  
Whereas, as a result of this act, 52 Early and Middle College programs have been developed as a collaboration between the public schools, the community colleges, and private business; and

Whereas, these schools have generally evidenced a decrease in their dropout rates and, as a result, have won national awards; and

Whereas, North Carolina has seven identified economic development regions, each with its own challenges in today's changing and demanding job market; and

Whereas, North Carolina has numerous innovative public and private programs based in Science, Technology, Engineering, and Mathematics (STEM); and

Whereas, to be efficient with the taxpayers' dollars, to continue to increase the graduation rate, and to prepare our students for twenty-first century jobs, it would be beneficial to map these innovative education programs, including the development of additional Early and Middle College programs and STEM programs, and other public and private education programs that have instructional programs that prepare students to meet the particular employment and workforce preparation needs of the respective economic development regions. In addition, it would be beneficial to develop curriculum frameworks that reflect innovative design principles in some of these schools that would address both regional and statewide employment needs; and

Whereas, the United States Department of Education has identified 16 career clusters as a tool to connect career technical education (CTE) to education, workforce preparation, and economic development; and

Whereas, the North Carolina STEM Community Collaborative/MCNC is supporting the creation of a replicable community visioning process, engaging business, policy, education, and community stakeholders in mapping their local needs and producing a plan for sustainable, local education innovation based in science, technology, engineering, and mathematics; and

Whereas, it would be beneficial to position each region and the State to compete in the regional, national, and global economy by creating a joint legislative study commission to review the vision plans and overall needs of each economic development region as well as the overall needs of the State; and

Whereas, the Commission should advise the North Carolina Education Cabinet and specifically the Department of Public Instruction as they develop standard instructional programs for twenty-first century career paths in accordance with the Early and Middle College and STEM models and study the implementation of pilot programs in these respective regions that will best suit the potential of the region and better prepare students for the increased academic demands of a global economy; Now, therefore,

The General Assembly of North Carolina enacts:

**SECTION 1.** There is established the Joint Legislative JOBS (Joining Our Businesses and Schools) Study Commission (Commission).

**SECTION 2.(a)** The Commission shall consist of the following members:

- (1) The Lieutenant Governor serving as the Chair.
- (2) Two members appointed by the Governor.

- (3) Eight members appointed by the President Pro Tempore of the Senate, to include:
  - a. Three members of the Senate, with one designated to serve as a vice-chair.
  - b. A representative of The University of North Carolina.
  - c. A representative of the Department of Public Instruction.
  - d. A representative of North Carolina's business and industry.
  - e. A public school teacher.
  - f. An individual with expertise in STEM education.
- (4) Eight members appointed by the Speaker of the House of Representatives, to include:
  - a. Three members of the House of Representatives, with one designated to serve as a vice-chair.
  - b. A representative of the Community College System.
  - c. A representative of the Independent Colleges and Universities.
  - d. A representative of the Department of Commerce.
  - e. A representative of North Carolina's business and industry.
  - f. A representative of North Carolina's school superintendents.
- (5) The Executive Director of the Education Cabinet or the Executive Director's designee, serving ex officio.

**SECTION 2.(b)** Members of the Commission shall serve a three-year term, beginning on July 1, 2009. The terms for members of the House of Representatives or the Senate shall end upon the expiration of the members' legislative term.

**SECTION 2.(c)** Members shall serve at the pleasure of the appointing authority. Vacancies on the Commission shall be filled by the same appointing authority who made the initial appointment.

**SECTION 2.(d)** A vice-chair shall serve as Chair in the absence of the Chair.

**SECTION 3.(a)** The Commission shall study issues related to economic development through innovative schools where instructional program frameworks reflect the high academic standards required of students to be successful as they transition to postsecondary education and future careers, including:

- (1) Technical and vocational needs of each economic development region;
- (2) Employment and workforce preparation needs of the State as a whole;
- (3) The economic vision plans for each economic development region;
- (4) The shortage of highly skilled employees such as technicians, teachers, allied health practitioners, including, but not limited to, nurses and doctors, scientists, and engineers;
- (5) The 16 career clusters identified by the United States Department of Education as well as additional career paths;
- (6) The development of a framework for assessment of readiness of a community or region to support twenty-first century economic demands of business and industry development and the scaling of innovative local programs to impact broader numbers of individuals in communities around the State; and
- (7) Any other matter pertinent to connecting career technical education to education, workforce preparation, and economic development through innovative schools.

**SECTION 3.(b)** The Chair shall appoint from the Commission's membership a North Carolina STEM Community Collaborative Advisory Committee (Community Collaborative) to ensure that the efforts of the Commission and the Community Collaborative are aligned and that the Commission is informed of the Community Collaborative's activities and that the Community Collaborative is informed of the Commission's activities.

**SECTION 4.** The Commission shall prioritize and customize the career clusters and identify additional career paths and report its recommendations to the State

Board of Education. The Commission shall (i) advise the North Carolina Education Cabinet and specifically the Department of Public Instruction as they develop, incrementally, standard instructional programs for career clusters and their corresponding career paths in accordance with the Early and Middle College model, and (ii) study the implementation of pilot programs in the seven economic development regions of the State that will best suit the needs of the regions and prepare students for the increased academic demands of a global economy.

**SECTION 5.** The Commission shall also study issues related to economic growth by the creation of measures and metrics which define the readiness of a community to deliver to all stakeholders the services that equip the workforce to be competitive in a STEM-intensive economy, including ensuring that students throughout the education pipeline gain the skills learned from science, technology, engineering, math, and other rigorous subjects. As a part of its study, the Commission may examine issues related to:

- (1) A replicable and perpetual model for aligning efforts of local business, industry, policy, and education stakeholders in community engagement for visioning student-centered learning;
- (2) The documentation and study of the innovative education programs critical for communities to be competitive in the STEM environment in the twenty-first century;
- (3) A framework to network these economic development regions, aligning State, regional, and external investment in replicable innovation;
- (4) Opportunities to leverage existing research, programs such as the College Foundation of North Carolina Bridges program, and other resources to maximize the impact of these existing resources and assets to avoid duplication, to achieve greater economies of scale, and to broaden the impact of these efforts by the most cost-effective means possible; and
- (5) Any other topics deemed relevant by the Commission.

**SECTION 6.(a)** The Commission shall, within the first eight months of its creation, meet at least once in each economic development region. The Commission may use any and all appropriate technology to enhance participation in its meetings and to reduce the costs incurred by the Commission. The Chair may appoint a volunteer advisory committee in each economic development region to assist the Commission in its work.

**SECTION 6.(b)** The Commission shall work closely with the business community across the State and shall encourage businesses and business leaders to partner with the Commission on the work of the Commission and to establish public-private partnerships with the pilot schools.

**SECTION 6.(c)** The University of North Carolina shall inform the Commission on the work of its constituent institutions on the elementary and middle school fundamental building blocks for secondary STEM success. This work should be a consideration for all communities which engage in visioning student-centered learning. The Commission shall also be informed by The University of North Carolina on its North Carolina STEM program inventory and how to make this inventory available to communities which engage in visioning student-centered learning.

**SECTION 7.** The Commission shall meet upon the call of the Chair. A quorum of the Commission shall be a majority of its members. The Legislative Services Commission shall grant adequate meeting space to the Commission in the State Legislative Building or the Legislative Office Building. G.S. 120-19 applies to requests made on behalf of the Commission.

**SECTION 8.(a)** The expenses of the Commission shall be paid by the Legislative Services Commission from available funds appropriated to the General Assembly. The Legislative Services Commission may accept grants on behalf of the State to be used to help defray the expenses of the Commission. Any application and

receipt of grants under this section shall be subject to the requirements of Chapters 120C and 138A of the General Statutes, and Article 14 of Chapter 120 of the General Statutes. Reasonable expenses of the Commission may include the cost of travel on a learning tour of innovative schools both inside and out of the State. Any grants funds received under this section shall be held by the General Assembly in a non-reverting special fund known as the JOBS Commission Fund to be administered by the Legislative Services Commission for expenses of the Commission. Any funds remaining in the JOBS Commission Fund shall transfer to the reserves of the General Assembly upon termination of the Commission.

**SECTION 8.(b)** Members of the Commission shall receive per diem, subsistence, and travel allowances in accordance with G.S. 120-3.1, 138-5, or 138-6, as appropriate. Individual expenses of five thousand dollars (\$5,000) or less, including per diem, travel, and subsistence expenses of members of the Commission, shall be paid upon authorization of the Chair of the Commission. Individual expenses in excess of five thousand dollars (\$5,000) shall be paid upon written approval of the President Pro Tempore of the Senate and the Speaker of the House of Representatives.

**SECTION 8.(c)** With approval of the Legislative Services Commission, the Legislative Services Officer shall assign professional and clerical staff to assist the Commission in its work during the interims between legislative sessions. The Directors of Legislative Assistants of the House of Representatives and the Senate shall assign clerical staff to the Commission. The Commission may contract for additional professional or consultant services in accordance with G.S. 120-32.02.

**SECTION 9.(a)** The Commission shall make an initial report of the results of its study to the State Board of Education by March 1, 2010. In its report, the Commission shall recommend at least four of the 16 career clusters identified by the United States Department of Education that will best and most broadly serve the immediate employment and workforce preparation needs of the State and the respective regions. Upon consideration of the recommendations of the Commission, the State Board of Education, in consultation with the Department of Public Instruction, shall develop the instructional programs for at least four career clusters and shall implement at least one JOBS Early or Middle College in each of the economic development regions beginning with the 2010-2011 school year where feasible, and in all other regions by the 2011-2012 school year.

**SECTION 9.(b)** The Commission may make recommendations resulting from its study to the State Board of Education and the Department of Public Instruction from time to time in its discretion.

**SECTION 9.(c)** The Commission shall monitor the implementation of its recommendations to the State Board of Education and the Department of Public Instruction and shall report and recommend to the General Assembly any legislation necessary to implement its recommendations.

**SECTION 9.(d)** The Commission shall make an interim report of the results of its study and its recommendations, including any proposed legislation, to the Joint Legislative Education Oversight Committee and the 2010 Regular Session of the 2009 General Assembly no later than May 15, 2010, and to the Joint Legislative Education Oversight Committee and the 2011 Regular Session of the 2011 General Assembly no later than February 1, 2011, and a final report to the Joint Legislative Education Oversight Committee and the 2012 Regular Session of the 2011 General Assembly no later than May 15, 2012. The Commission shall file a copy of each Commission report with the President Pro Tempore of the Senate's office, the Speaker of the House of Representatives' office, and the Legislative Library.

**SECTION 10.** The Commission shall terminate on June 30, 2012, or upon the filing of its final report in accordance with Section 9.(d) of this act.

**SECTION 11.** This act is effective when it becomes law.

## BACKGROUND

In 2003, the Innovative Education Initiatives Act was enacted by the General Assembly. That legislation instructed the Education Cabinet to set as a priority, cooperative efforts between secondary schools and institutions of higher education to reduce the high school dropout rate, increase high school and college graduation rates, decrease the need for remediation in institutions of higher education, and raise certificate, associate, and bachelor degree completion rates. The Act also created Cooperative Innovative High School Programs, which authorized boards of trustees of community colleges and local boards of education to jointly establish cooperative innovative programs in high schools and community colleges that would expand students' opportunities for educational success through high quality instructional programming. The programs were to target high school students at risk of dropping out of school before attaining a high school diploma, or high school students who would benefit from accelerated academic instruction.

The Innovative Education Initiatives Act gave a statewide impetus to the creation of Early College High Schools, a program profiled by the New York Times in a February 1, 2010 article, and recognized with a 2008 Harvard Innovations in American Government Award. Early College High Schools are high schools with an academically rigorous course of study where students can graduate with both a high school diploma, as well as an Associate in Art or Science degree for college transfer, an Associate in Applied Science for career and technical skills, or two years of university transfer credit. Since the passage of the Innovative Education Initiatives Act, seventy Early College High Schools have been opened in North Carolina. Early College High Schools are physically located on the campuses of high schools, community colleges, and university or college campuses, as well as operating on virtual campuses using online learning and engaging in on-site learning at private businesses. Nearly seventy percent of students enrolled in North Carolina's Early College High Schools identify themselves as first generation college students.

S.L. 2009-339 established the Joint Legislative Joining Our Businesses and Schools (JOBS) Study Commission (JOBS Commission) to study issues related to economic development through innovative schools across the State of North Carolina. The legislation directed that the Lieutenant Governor serve as chair of the JOBS Commission, which consists of twenty members from the business and education communities, with appointments by the Governor, the Speaker of the House of Representatives, and the President Pro Tempore of the Senate. The Executive Director of the Education Cabinet serves as an ex officio member.

The JOBS Commission, as an extension of the work that was begun in 2003 with the passage of the Innovative Education Initiatives Act, was charged with studying issues related to economic development, and the benefit workforce development and preparation might derive from the implementation of innovative high schools. The Commission was specifically to focus on instructional programming frameworks that would reflect high academic standards required of students to allow them to be successful and prepared for 21st Century jobs. The framework should prepare them to transition to postsecondary education and reduce the need for remediation. The Commission was charged with conducting hearings within the seven economic development regions to receive information about the economic vision of each region and what business and industry clusters can be reasonably expected to locate or expand within those regions. The Commission was also directed to seek input about educational preparation within

each region for these 21st Century jobs and connecting career technical education to education, workforce preparation, and economic development through innovative schools.

S.L. 2009-339 directed the Commission to prioritize and customize career clusters, identify additional career paths, and report its recommendations to the State Board of Education. The Commission was also directed to study the implementation of pilot programs in the seven economic development regions of the State that will best suit the needs of the regions and prepare students for the increased academic demands of a global economy. In addition, the Commission was directed to study issues related to economic growth by the creation of measures and metrics which define the readiness of a community to deliver to all stakeholders the services that equip the workforce to be competitive in a STEM intensive economy, including ensuring that students throughout the education pipeline gain the skills learned from science, technology, engineering, math, and other rigorous subjects.

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## **2011-2012 COMMISSION PROCEEDINGS**

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The Joint Legislative Joining Our Businesses and Schools (JOBS) Study Commission held 3 meetings following the adjournment of the 2011 legislative session and since the last interim report.

**October 11, 2011**

### **Welcome / Opening Remarks**

- Lt. Governor Dalton

### **2011 Legislative Update**

- Sen. Harry Brown

### **Business Engagement Guide Overview / Next Steps**

- Caroline McCullen, Director – SAS Education Initiatives

### **Institute for Emerging Issues – Creativity Inc – Social Media Site**

- Diane Cherry – Environments Policy Manager, IEI

### **Updates on JOBS Commission Supported Schools**

- Hospitality & Tourism – Alyssa P. Barkley / NC HEF Executive Director
- Five – Year Finance Academy – Kimberly Reynolds
- Northeast Regional Ag-Bio School – Dr. Marshall Stewart
- Cumberland International Early College High School – Lavette Alston – Principal / Valeria Torres-Colon –student
- Wake / NC State University STEM Early College, Rob Matheson – Principal

### **STEM Statewide Strategic Plan**

- NC Superintendent of Public Instruction, Dr. June Atkinson

### **Race to the Top STEM Anchor Schools and Network Clusters**

- Dr. Dana Diesel Wallace, NC New Schools Project

### **JOBS Commission Discussion & Next Steps**

- Whole Commission

**February 28, 2012**

### **NC STEM Learning Network**

- Sam Houston, President – NC SMT Center
- Karl Rectanus, Leader – NC STEM Community Collaborative

### **NC STEM Learning Network – STEM Web Portal**

- Stephanie Wright, JOBS STEM Community Collaborative Advisory Panel Intern
- Alfred Mays, Web Design Consultant

### **Yadkin Valley Regional Career Academy**

- Barry Sink, Co-Chair of Steering Committee – YVRCA

**Education & Business Match – Wake County Pilot**

- Kendall Hageman, Education Program Manager – IEI / NC State University
- Judy Pepler, Chief Transformation Officer / Chief of Staff – Wake County PSS
- Caroline McCullen, Director of Education Initiatives – SAS

**Northeast Region Agriscience & Biotechnology School**

- Dr. Tony Habit, President – NC New Schools Project

**Hospitality & Tourism Early College High School**

- Alyssa P. Barkley, Executive Director – NC Hospitality Education Foundation

**Committee Discussion**

- Kara McCraw, Legislative Counsel

**May 15, 2012**

**Overview of Final JOBS Commission Report**

- Kara McCraw, Legislative Committee Counsel

**Committee Discussion on Final Report**

- JOBS Commission Members

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## **SUMMARY OF 2011-2012 COMMISSION PROCEEDINGS**

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This section of the report provides a brief summary of the Commission meetings since the last interim report. It is not intended to be a complete, official record of those meetings. The official record of the Commission's meetings, including minutes and handouts distributed to the Commission members, is available in the Legislative Library. Previous meeting agendas are attached to this report in Appendix.

### **October 11, 2011**

The Joint Legislative Joining Our Businesses and Schools (JOBS) Commission held its first meeting following the 2011 legislative session on October 11, 2011 at the Legislative Office Building in Raleigh.

Senator Brown provided the Commission with an update of the 2011 Legislative Session. He specifically mentioned the regional schools bill which has a direct effect on the agri-science school in northeastern North Carolina. He expressed the hope that this bill would break down some of the county line barriers and join low wealth counties with wealthier counties for mutual benefit.

Caroline McCullen, Commission Member and Director, SAS Education Initiatives, gave an overview of the Business Engagement Guide which is an outline of ways for businesses to join with schools. The guide addresses how businesses might be able to become involved with experience-based activities involving students. This guide has been compiled from existing materials and sites.

Diane Cherry, Environments Policy Manager for the Institute for Emerging Issues (IEI), talked to the Commission about the IEI's development of a social media site. She mentioned that one of IEI's focuses as a public policy organization is to examine North Carolina's competitiveness.

The next five presenters provided updates on JOBS Commission supported schools: Alyssa Barkley, Executive Director of the North Carolina Hospitality Education Foundation, spoke about the Pro Start program, which was created by the National Restaurant Association to deal with training in the hospitality, food service and tourism fields. This intensive job training program requires a 400-hour work experience component. Avery County Schools and Asheville-Buncombe County Schools are supportive of the program.

Kimberly Reynolds spoke about the five-year Finance Academy proposal which has drawn interest from five banks in the Charlotte-Mecklenburg area, as well as interest from the Charlotte-Mecklenburg School System and Central Piedmont Community College.

Dr. Marshall Stewart spoke next about the Northeast Regional Ag-Bio School. He said the idea began about five years ago in Bertie County with an early college high school

and that work is still going on. The site for the school, the Vernon James Research Center, is a cooperative operation between NC State University and the NC Department of Agriculture.

Allison Violette, Associate Superintendent for Curriculum, Cumberland County Schools, began the presentation about the Cumberland International Early College High School by thanking all of the various people and organizations that collaborated to create the school. She then introduced the principal of the school, Ms. Lavette Alston, who added her thanks for the support of the Commission. Ms. Alston stated that the freshman class of the Cumberland International Early College High School consists of 54 students. These students chose the school colors (red and black) and the mascot (The Ambassador). As a language and global studies school, the language courses offered include Arabic, Mandarin Chinese, and Spanish. Ms. Alston also noted that all courses offered are honors level. Valeria Torres-Colon, a student at the Cumberland International Early College High School, shared her personal view of the benefits and goals of the school.

Rob Matheson, Principal of the Wake/NC State University STEM Early College, spoke next about the STEM Early College. He said that the school sought to reach the underserved, the underrepresented, and the first time college-goers. He stated that there are 55 students in the freshman class. Currently, the school is located in the Creative Services Building on NC State's campus, but in 2013, the STEM Early College will be located in the newly renovated Cherry Building at Dorothea Dix, which is now part of the Centennial Campus.

Next, Dr. June Atkinson, Superintendent of Public Instruction, spoke on the STEM Statewide Strategic Plan (Plan). She started her presentation by recognizing the members of the Commission for their work with the Plan. She said the Plan on paper was for grades K-12, but with the work of community colleges and universities, the Plan is also aligned with grades K-20. She also mentioned that the draft of the Plan has been shared with about 10 different groups for their input.

Dr. Dana Diesel Wallace of the New Schools Project presented to the Commission on the Race to the Top STEM Anchor Schools and Network Clusters. She said that the integrated curriculum is focused on how content is used in the workforce. Beyond the classroom extends the learning which might not always happen in the classroom. STEM seeks to teach the idea that content can be used in applied ways such as problem solving, collaboration, and communication. Dr. Wallace mentioned the need for coaching to go along with professional development for teachers and the need for content preparation for those teachers. She also mentioned the need for the sharing of knowledge and experience among the various STEM schools so that success can be replicated.

### **JOBS Commission Discussion and Next Steps**

Lieutenant Governor Dalton opened the floor for discussion by asking the Commission members to offer their thoughts on next steps for the Commission. Commission members suggested several strategies to continue and expand the work of the

Commission. These included meeting with editorial boards at newspapers across the State to discuss the Commission's initiatives, involving classroom teachers to develop support for the innovative ideas and strategies, seeking involvement of the broad spectrum of the community in schools, exploring the use of technology in industry and other professions to increase productivity and assist in teacher training, considering additional time for teachers to collaborate and work cooperatively in the school setting, and developing the role of the Commission as an intermediary in education reform.

### **February 28, 2012**

The JOBS Commission met on February 28, 2012 at the Legislative Office Building in Raleigh.

Dr. Sam Houston, President of NC STEM, and Karl Rectanus, Leader of the NC STEM Community Collaborative, presented to the Commission about the NC STEM Learning Network's vision of connecting the various STEM initiatives on the local, state, and national levels. The North Carolina K-12 STEM Strategy, as aligned with post-secondary and economic needs, was approved by the JOBS Commission in October 2011 and adopted by the State Board of Education in November 2011. The Network develops methods of keeping track of STEM efforts from kindergarten to college.

Stephanie Wright, JOBS STEM Community Collaborative Advisory Panel Intern, and Alfred Mays, Web Design Consultant, spoke next about the STEM Web Portal. Ms. Wright provided a profile of STEM assets across the state. Mr. Mays provided a conceptual view of what a STEM website home page might look like.

Next, Caroline McCullen, Director of Education Initiatives at SAS, Judy Pepler, Chief Transformation Officer and Chief of Staff, Wake County Public Schools, and Kendall Hageman, Education Program Manager with the Institute for Emerging Issues and NC State University, spoke about the Education and Business Match-Wake County Pilot. Commission member McCullen said the Commission heard concerns in all seven of the economic development regions for the need to bring business volunteers together with the education system. In order to address this need, the Business subcommittee of the Institute for Emerging Issues created a website and the North Carolina Committee for Business Education added its resources; from there started the conversations with Wake County Public Schools.

Judy Pepler mentioned the need for an "easy button" to connect volunteers with schools. She also mentioned the customization of the website to allow background checks for volunteers and a possible funding request for the first year of operation of the website.

Kendall Hageman demonstrated the website for the volunteer match. She stated that the cost of this pilot is approximately \$20,000 per year for Wake County Schools and \$104,000 per year statewide.

Barry Sink, Co-Chair of the Steering Committee for Yadkin Valley Regional Career Academy, began his presentation by assuring the Commission that the Yadkin Valley Regional Career Academy would open in August of this year. The Academy is focused on business needs of the Piedmont Triangle area. The TriStem consultant firm has interviewed over 90 CEOs in the area seeking information about business employment needs and ways to form the education system to meet such needs. The Academy's focus is on global linguistics, advanced manufacturing for aviation, and medical infomatics. The first campus will open in Davidson County and the second campus will open in Surry County in August 2013.

Dr. Tony Habit, President of the NC New Schools Project, spoke to the Commission about the Northeast Regional Agriscience and Biotechnology School. He expressed the support from Martin, Tyrrell, Pitt, Washington, and Beaufort counties, and the passage of the Regional Schools Act as being key pieces in the regional school concept. He stated that North Carolina is now third in the nation in biotechnology and while there were job losses during the recent recession, biotechnology jobs increased in North Carolina by 4.1%.

Alyssa Barkley, Executive Director, NC Hospitality Education Foundation, addressed the Commission regarding the Hospitality and Tourism Early College High School. She said that efforts to promote hospitality education in Western North Carolina had connected with STEM initiative interests in the Asheville-Buncombe-Madison County area. There have been meetings with secondary and post-secondary educators, parents, and industry representatives with particular attention given to the Hospitality Association's Pro-Start educational program.

Kara McCraw, Legislative Counsel, presented the Commission with a review of the JOBS Commission work since the creation in 2009.

Commission members discussed the work of the Commission. Pamela Townsend, Commission member, stated that the Commission had made a difference in K-12 STEM education, and that she hoped that strong consideration would be given to how the work of the Commission could go forward, perhaps through the North Carolina Committee for Business Education.

**May 15, 2012**

The Commission reviewed and approved the Final Report.

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## FINAL COMMISSION RESULTS

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The JOBS Commission worked diligently since its first meeting in October 2009 to study issues related to economic development through innovative schools across the State of North Carolina. The Commission held 17 meetings, including one in each of the seven economic development regions. Through visiting each region, the Commission was able to gather important information about the regional economic vision plans and workforce needs and the employment and workforce preparation needs of the State as a whole. Furthermore, the Commission focused upon advancing science, technology, engineering and math (STEM) education to better prepare students for skilled 21<sup>st</sup> Century jobs.

The Commission recommended eight pieces of legislation that were signed into law, supported two innovative schools that have opened, supported two innovative schools that are slated to open in 2012, helped develop and pass a statewide STEM education plan, and helped launch a public-private STEM education initiative.

### **1. Progress of Recommended Pilot Programs**

Following the Commission's recommendation in the 2010 Interim Report, planning and development began in three economic development regions for pilot schools focused around specific career clusters, with the goal of these schools serving as prototype models which can accelerate change and improve quality. The Commission finds that the following progress has been made on establishment of these schools and encourages these schools and their partners to continue their efforts.

- **Science, Technology, Engineering and Mathematics (STEM) - Wake County - NC State University STEM Early College High School**

In the Research Triangle Region, Wake County Public Schools and North Carolina State University (NCSU) have worked with the NC New Schools Project to develop the Wake County/NC State University STEM Early College High School (STEM ECHS). The STEM ECHS has the mission of providing a highly supportive and academically challenging learning environment for students underserved in a traditional high school setting and underrepresented in the STEM disciplines, including first generation college going students, who will graduate prepared to compete globally in careers related to science, technology, engineering, and mathematics.

The STEM ECHS opened in August 2011 and, as recommended by the Commission, will examine STEM topics through the lens of the 14 Grand Challenges for Engineering identified by the National Academy of Engineering. The STEM ECHS was identified in North Carolina's successful Race to the Top proposal as one of the North Carolina New Schools Project's four STEM anchor schools which will accelerate the development of a fully articulated and coherent

curriculum, instruction, assessment, and professional development model consistent with the NC vision for STEM education. The school was supported by the Professional Engineers of North Carolina and representatives from energy companies across the state.

The STEM ECHS will be permanently located on the NCSU Centennial campus and will have a total population of 250 students. Funding recommended by the Commission enabled the hiring and early start of the principal of the STEM ECHS to prepare for the school's opening.

- **Language and Global Studies - Cumberland International Studies Early College High School**

In the Southeast Region, Cumberland County Schools and Fayetteville State University, partnering with the NC New Schools Project and the Center for International Understanding, developed the Cumberland International Studies Early College High School (Cumberland ECHS). This effort was supported by the United States military, Visiting International Fellows, World View, and regional businesses.

The Cumberland ECHS has the mission to graduate all students globally competent, prepared to communicate, collaborate, and compete locally, nationally, and internationally through proficiency in a second language of strategic interest, global and cultural communications, and authentic project-based learning on global issues. The Cumberland ECHS is located on a temporary site near the Fayetteville State University campus. Funding will be required to retrofit a permanent location for the Cumberland ECHS on the Fayetteville State University campus.

The Cumberland International Early College High School opened in August 2011 with 54 students, all freshmen. Each year the school will add a new class of freshmen, with its first graduating class in 2015.

## **2. Development of Regional High School Model/Northeast Regional School of Biotechnology and Agriscience**

Following the Commission's recommendation in the 2010 Interim Report to establish a regional high school focused on agriscience and biotechnology, the General Assembly created the North Carolina Agriscience and Biotechnology Regional School Planning Commission (RSPC). Based on these reports, the Commission recommended that a board be established to govern a regional school of agriscience and biotechnology which includes representation of local boards of education, higher education partners, business leaders, and parents.

The Commission, after seeking public input, recommended that the regional school be located at the Vernon G. James Research & Extension Center in Washington County, and serve counties in Northeastern North Carolina.

Senators Harry Brown and Fletcher Hartsell introduced Senate Bill 125 for the 2011 legislative session to authorize the Northeast school. Interest in the regional concept prompted expansion of the measure to permit innovative, collaborative schools statewide. Senator Brown expressed to the Senate that this concept had so much potential that it warranted a statewide bill. The final measure, which was signed into law, allows multiple school districts to collaborate and establish regional schools.

- **Northeast Regional School of Biotechnology and Agriscience**

Following the permitting legislation, school boards in Pitt, Martin, Beaufort, Washington, and Tyrrell Counties expressed interest in participating in the school, with a targeted opening in Fall 2012. The regional early college high school will be operated in conjunction with school districts in the Northeast, North Carolina State University and the NC New Schools Project, and its private sector partner, Avoca Farms. The Board of Directors recently hired a principal and the school is accepting applications for a freshman class to begin in August 2012. The school will open for approximately 60 9th graders in 2012-2013 and will expand to 7th and 10th graders the following school year, adding 120 additional students. The school is expected to add one more class each year for a maximum enrollment of 420 students in grades 7-13.

The Commission is pleased that the Northeast Regional School of Biotechnology and Agriscience will be the first in North Carolina in which multiple school districts worked together to develop a regional school. The Commission also discussed using this model for a sister school at the North Carolina Research Campus in Kannapolis.

### **3. Education and Economic Alignment**

The Commission found in the 2010 and 2011 Interim Reports that communication between leaders in education and economic development is critical to preparing students to meet employment and workforce preparation needs of each economic development region and the State of North Carolina. In 2010, the Commission recommended that each member of the State Board of Education serve as a non-voting ex officio member of an economic development region to better foster communication and sharing of information in development of instructional programs for 21<sup>st</sup> Century career paths which best suit the needs of the region. The General Assembly passed this legislation (Senate Bill 1244) in the 2010 legislative session.

The Commission also recommended that the Superintendent of Public Instruction be added as a member of the North Carolina Economic Development Board. The General Assembly passed this legislation (House Bill 181) in the 2011 legislative session.

#### **4. Statewide STEM Visioning Plan**

In meetings across the State, the JOBS Commission repeatedly heard about the need for more skilled workers in science, technology, engineering, and math (STEM). In the 2011 Interim Report, the Commission's STEM Advisory Panel, with the help of an intern provided by the Golden LEAF Foundation, documented that while well over 500 efforts related to STEM education are occurring throughout the State, there is some disconnect between these efforts, and there needed to be more collaboration and alignment. The Commission found that a comprehensive plan was needed to connect these initiatives from kindergarten to college and the NC STEM Advisory Panel of the Commission worked with the Department of Public Instruction (DPI) to develop a comprehensive statewide strategic plan.

The work of the JOBS NC STEM Advisory Panel on the development of a State STEM plan was advised and informed by Battelle Memorial Institute, a national leader in STEM Education Strategy; their North Carolina partner, the NC STEM Community Collaborative; and others from an array of organizations with STEM interest. The NC STEM Community Collaborative and its public and private partners also invested resources and expertise to support these goals in the State. The JOBS NC STEM Advisory Panel was supported by and worked directly with DPI and its assigned STEM team on these efforts.

The JOBS Commission endorsed the Statewide STEM plan at its October 2011 meeting. In November 2011, the State Board of Education unanimously endorsed North Carolina's first statewide STEM strategy.

As that report states, "North Carolina's leaders agree that a coordinated, statewide STEM Education strategy with clear direction, support and goals is needed to ensure a workforce that is prepared for the high-skill, high-wage, high-demand jobs of a knowledge-based and innovation economy. The plan must be built on a shared vision that leverages public and private resources in the most effective and efficient manner possible, moving North Carolina further and faster toward a world-class workforce and sustained economic growth and development in a global market."

The strategy calls for increasing STEM achievement through better integrating STEM into the curriculum, a public awareness campaign on the importance of STEM education, and connecting and sharing resources across all 100 counties. The strategy aims to increase connection and collaboration among public schools, the State community college system, the UNC system, and the public and private sectors.

- **NC STEM Learning Network**

The Commission supported the development of the NC STEM Learning Network, which launched on March 1, 2012 as a public-private partnership. North Carolina has a wealth of STEM resources, but needs to do a much better job of sharing this knowledge and best practices statewide. The NC STEM Learning Network will bring together the State's education systems and private sector to give North Carolina a

vehicle to coordinate the many efforts of government, educators, and businesses to advance STEM education. It has the support of the State's education systems including: The University of North Carolina system, the Department of Public Instruction (DPI), and the North Carolina Community College System. It will be run as a public-private partnership through the N.C. Science, Mathematics and Technology (SMT) Education Center. The NC STEM Learning Network will help guide the implementation of the statewide strategic plan developed in 2011 to better coordinate STEM education initiatives with a goal of increasing student achievement, community involvement, and corporate support for STEM education. Over 500 separate STEM initiatives were identified statewide and this effort would inventory and scale out these initiatives. The NC STEM Learning Network's immediate plans include assisting DPI to develop a network of schools and districts to adopt cutting-edge STEM education programs and trainings, as well as creating a web portal allowing citizens to learn about and connect with STEM education resources in their community, developing quality standards for STEM education and tools to help schools meet those standards, including professional development for teachers; and creating more public awareness of the essential role STEM education plays in the economic vitality of communities. This will give the State a solid structure for the advancement of STEM education.

## **5. Further Initiatives**

The Commission supported the development of the Yadkin Valley Regional Career Academy, which is scheduled to open the first of two planned campuses in August 2012. The Yadkin Valley Regional Career Academy goals are to align with the economic needs of the Piedmont Triad region.

The Commission also supported the efforts to establish a Hospitality and Tourism Early College High School in the Asheville-Buncombe County area. This school is in the planning stages and the Commission encourages its continued development.

## JOBS COMMISSION ENACTED LEGISLATION

<b>2010 Session</b>		
<b>Introduced Legislation</b>		<b>Outcome</b>
HB 1699/ SB 1198	Educ. Cabinet Est. STEM Priority	SB 1198 was enacted as S.L. 2010-41 and became law effective July 1, 2010.
HB 1700/ SB 1202	Career Acad. As Coop. Innov. High School	This recommended legislation was incorporated into the Budget – S.L. 2010-31, Sec. 7.21. This section became effective June 30, 2010 and applies beginning with the 2010-2011 school year.
HB 1718/ SB 1200	JOBS Commission Pilot Schools	This recommended legislation was partially included in the Budget Money Report, Part F-Item 23 – providing \$100K each for the creation of sites in Wake and Cumberland Counties.
HB 1719/ SB 1201	Add'l Flex./Coop. Innovative High Schools	SB 1201 was enacted as S.L. 2010-182. This law became effective August 3, 2010, and applies beginning with the 2010-2011 school year.
H1724/ SB 1199	NC Biotechnology and Agriscience School	SB 1199 was amended in committee and was enacted as S.L. 2010-183 and became effective August 3, 2010.
HB 1826/ SB 1244	SBOE Members Ex. Officio to Econ. Dev. Comm.	SB 1244 was enacted as S.L. 2010-184, and became effective August 3, 2010.
<b>2011 Session</b>		
<b>Introduced Legislation</b>		<b>Outcome</b>
HB 181/ SB 124	Add Superintendent to NC Economic Development Board	HB 181 was enacted as S.L. 2011-121, and became law effective June 13, 2011.
SB 125/ HB 264	Regional Schools	SB 125 was enacted as S.L. 2011-241 and became law effective June 23, 2011.

## **COMMISSION SUMMARY 2009-2012**

The JOBS Commission was authorized by S.L. 2009-339 and charged with studying issues related to economic development through innovative schools where instructional program frameworks reflected high academic standards required of students to be successful in transitioning to postsecondary education and future careers.

Pursuant to its charge, the Commission began its work in the fall of 2009 and spring of 2010 by visiting each of the seven economic development regions of the State to investigate and collaborate on regionally-focused economic needs. As part of each visit, the Commission held a public hearing and solicited input from leaders in business, economic development, education, and government. Members heard about the unique strengths of each region as well as the region's specific employment and workforce preparation needs. The Commission received recommendations from the economic development regions on career clusters of importance to each region.

In its 2010 Interim Report to the North Carolina General Assembly, the JOBS Commission recommended the creation of the following:

- A biotechnology and agriscience focused regional school in the Northeast Region.
- A language and global studies focused school in the Southeast Region.
- A STEM focused school in the Research Triangle Region.
- Pilot programs focused on health sciences in the Eastern, Western, and Charlotte Regions.
- A pilot program focused on transportation, distribution, and logistics with a focus on Aerospace in the Piedmont Triad Region.
- A pilot program focused on advanced manufacturing in the Western Region.

As part of the 2010 Interim Report, the Commission also recommended legislation to create regional schools, to make members of the State Board of Education ex officio members of the boards of the economic development regions, to provide more flexibility for cooperative innovative high schools, and to include five-year career academies as a type of cooperative innovative high school. The Commission's STEM Community Collaborative Advisory Committee also encourages investment in STEM programs and expansion of STEM Communities, and recommended legislation to close the STEM gap.

The Commission continued its work in the fall of 2010 and spring of 2011, including receiving updates on pilot development and new models being created around the State, further exploration of issues concerning governance for a regional school model, and additional work on issues related to STEM education.

In the 2011 Interim Report, the Commission recommended continued work on the Wake County - NC State University STEM Early College High School in the Research Triangle Region and the Cumberland International Studies Early College High School in the Southeast Region, and also recommended that a Statewide STEM visioning plan be developed. The Commission also encouraged the development of the Yadkin Valley Regional Career Academy and Contemporary Science Center. The Commission proposed legislation to develop a regional high school model and to add the Superintendent of Public Instruction as a member of the North Carolina Economic Development Board.

As a result of the JOBS Commission's recommendations and legislative proposals, a number of innovative, career-focused high schools have opened. The Wake-NCSU STEM School and Cumberland County Early College High School for Language, Culture and Diplomacy received planning funding from the General Assembly and opened in the fall of 2011. S.L. 2011-241 was enacted enabling the establishment of regional high schools, and the Northeast Regional High School of Biotechnology and Agriscience is currently in planning and will open in the fall of 2012. The Yadkin Valley Regional Career Academy will also open in the fall of 2012. Cooperative and innovative high schools were also granted greater flexibility through S.L. 2010-182.

Increased communication between leaders in education and economic development has also been achieved through the enactment of S.L. 2010-184, placing members of the State Board of Education on the boards of the economic development regions, and S.L. 2011-121, adding the State Superintendent of Public Instruction to the North Carolina Economic Development Board. S.L. 2010-41 directed the Education Cabinet to set STEM education priorities. The Commission's work led to the adoption of the Statewide STEM Strategic plan to align with post-secondary and economic needs by the Commission and the State Board of Education in the fall of 2011. The NC STEM Learning Network is now under development to align and coordinate the Strategic Plan's goals for K-12 with efforts in higher education and the private sector.

## **FINDINGS AND RECOMMENDATIONS**

The JOBS Commission finds that there is a great demand for workers in science, technology, engineering, and mathematics (STEM) related occupations, but that graduates are insufficiently prepared in STEM fields to meet this need, and recommends the continuation of efforts to expand and improve access to STEM education through North Carolina.

The JOBS Commission previously urged the development of a Statewide K-12 STEM strategy aligned with post-secondary and economic needs to address this concern, and finds that progress has been made in this endeavor through the North Carolina STEM Learning Network. The Commission finds that the NC STEM Learning Network, coordinated by the NC Science, Mathematics, and Technology Education Center, connects the State Board of Education and Department of Public Instruction, The University of North Carolina System, and the NC Community College System with the private sector to increase STEM achievement, build public understanding and support of STEM education, and align public and private resources through a number of strategies. The Commission recommends the continuation of efforts to develop the recommended strategies to accomplish the goals of the NC STEM Learning Network.

The Commission finds that, as part of the NC STEM Learning Network, extensive work has been completed to lay the foundation for the NC STEM Portal which will serve as a first stop for stakeholders in STEM and connect individuals to existing STEM resources. The Commission encourages the continued gathering of assets and development of the web portal for this important resource.

The Commission also finds that another prior recommendation, a regional high school focused on STEM, will open this fall. The Northeast Regional Biotechnology/Agriculture School will be a highly innovative STEM school with the goal of supporting a Statewide biotech STEM network and providing professional development to teachers across the region in STEM strategies. The Commission commends the work in establishing this school to serve the needs of the Northeast Economic Development Region and encourages others to use the school as a model for other economic development regions.

The Commission wishes to build upon the successes of the schools it has supported and replicate those models across the state. It is recommended that the Final Report be sent to the membership of the State Board of Education and the Superintendent of Public Instruction. Upon expiration of the Commission, it is recommended that another group continue the Commission's work. The North Carolina Business Committee for Education (NCBCE), a 501(c)(3) nonprofit comprised of business leaders from across the state, shares the Commission's mission of ensuring that every student in North Carolina

graduates from high school ready for life and work in a global society. The Commission recommends that the Final Report be sent to NCBCE and encourages the NCBCE Board to consider helping coordinate future efforts to join our businesses and schools.

# APPENDIX

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## 2009-2010 Interim Meetings

**October 12-13, 2009**  
**Raleigh, NC**

**October 12, 2009**

### **Background Information – Legislation and Early Colleges**

- Dr. Shirley Iorio, Legislative Analyst
- Kara McCraw, Legislative Analyst

### **Real World Examples**

- Wake Early College of Health and Sciences
  - Teresa Pierre, Principal
- Bertie Science, Technology, Engineering and Mathematics High School
  - Justin Harmon, Student
  - Martynez White, Student
  - Sharon Tann, Guidance Counselor
  - Kezia Lee, Math Teacher

### **Career-Ready Commission**

- Dr. June Atkinson, State Superintendent of Public Instruction

### **DPI Career Clusters**

- Felicia Gray-Watson, Career Development, CTE Support, NC DPI

### **NC Chamber of Commerce**

- Lew Ebert, President, NC Chamber of Commerce

### **North Carolina Economic Development Regions**

- John Chaffee, President & CEO, North Carolina's Eastern Region

### **North Carolina Community College System**

- Dr. Scott Ralls, President, North Carolina Community College System

**October 13, 2009**

### **MCNC**

- Joe Freddoso, President & CEO, MCNC
- Karl Rectanus, Director, NC STEM Community Collaborative

### **New Schools Project**

- Dr. Tony Habit, President, New Schools Project

**November 17, 2009**  
**Williamston, NC**

Northeast Region Partnership -Presentation of Vision Plan

- Vann Rogerson, President & CEO, Northeast Region Partnership

### **Panel Discussion**

- Caroline McCullen – SAS, Director Education Initiatives & Commission Member (Moderator)
- Dr. Tony Habit, President, New Schools Project (Early College Program)
- Johnny Jacobs, Controller, Nucor Steel (Business & Industry)
- Dr. Tom Daly III, Martin County Superintendent (Public School System)
- Dr. Willie Gilchrist, Chancellor, ECSU (Local University)
- Dr. Ervin Griffin, President, Halifax Community College (Local Community College)

### **Regional Perspective**

- Dr. Chip Zullinger, Superintendent, Bertie County Schools

### **STEM**

- Dr. Sam Houston, President, NC Science, Mathematics, and Technology Education Center

### **Public Comments**

**December 11, 2009  
Kannapolis, NC**

### **Charlotte Regional Partnership**

- Kenny McDonald, Vice President, Economic Development Services, Charlotte USA

### **Building Tomorrow's Prepared Workforce**

- Grant Godwin, Vice President, Martin Marietta Composites (Moderator)
- Rick Admani, Chief Operating Officer, Diagnostic Devices, Inc.
- John Cox, CEO, Cabarrus Regional Chamber of Commerce
- Scott Lampe, Chief Financial Officer, Hendrick Motorsports
- Rick Parsons, Executive Vice President, Global Staffing, Bank of America
- Catherine Stancombe, Vice President of Human Resources, Duke Energy
- John Torbett, Vice President Business Development, Defense Technologies

### **Future-Ready Graduates: It Takes a Whole Village**

- Caroline McCullen, SAS, Director Education Initiatives (Moderator)
- Dr. Ed Davis, Superintendent, Union County Schools
- Dr. Joan Lorden, Provost & Vice Chancellor for Academic Affairs, UNC-Charlotte
- Dr. Tony Habit, President, New Schools Project
- Dr. Tony Zeiss, President, Central Piedmont Community College

### **Presentation on Academy Programs**

- Greg Gift - Assistant State Director Career and Technical Education, NC DPI

### **Public Comments**

**January 19, 2010  
Raleigh, NC**

### **14 Grand Challenges Facing Engineering and STEM skills Needed for the New World Job Market**

- Dr. Louis Martin-Vega, Dean of the College of Engineering, North Carolina State University

**Update on STEM & Collaborative Work**

- Karl Rectanus, Leader, NC STEM Community Collaborative

**Kenan Fellows Program**

- Dr. Valerie Brown-Schild, Program Director
- Susan Parry, Assistant Director for Partnerships and Resource Development

**January 29, 2010  
Rocky Mount, NC**

**North Carolina's Eastern Region Partnership Vision Plan**

- John Chafee, President and CEO, Eastern Region Partnership

**A Perfect Match: Lenoir County and NC STEM**

- John Chafee, President and CEO, Eastern Region Partnership
- Rick Davis, NC Site Operations Director, Spirit AeroSystems
- Steve Hill, Secondary Education Coordinator, Lenoir Public Schools
- Nathaniel Vause, President & CEO, Granville Academy North Carolina
- Tom Vermillion, President, DEPS & Lenoir Committee of 100

**Business and Education Panel**

- Moderator, Tricia Willoughby, Executive Director, NC Business Committee for Education
- Dr. Annette Brown, Asst. Superintendent for Instructional Services and Accountability, Craven County Schools
- Dr. Bill Carver, President, Nash Community College
- Rick Davis, NC Site Operations Director, Spirit AeroSystems
- Dan Gerlach, President, Golden LEAF Foundation
- Dr. Michael Priddy, Partner, New Hope Foundation & Retired School Superintendent
- Tyree Walker, Chief Human Resources Officer – University Health System

**Student Early College Presentation**

- Drucilla Cofield, Student, Nash Early College High School
- Hasan Hasan, Student, Nash Early College High School
- William Heath, Student, Nash Early College High School

**Public Comments**

**February 18, 2010  
Fayetteville, NC**

**North Carolina's Southeast Vision Plan**

- Steve Yost, Director – NC's Southeast
- 

**A Perfect Match: Ft. Bragg Region and NC STEM**

- Dr. Valerie B. Brown-Schild, Director - Kenan Fellows Program
- Dr. Thomas Conway, VC & Chief of Staff - Fayetteville State University
- Wayne Grant, Senior Associate - Booz | Allen | Hamilton
- Dr. Jane Smith, Program Manager for Education - BRAC Regional Task Force

**Language and Global Competency Presentation**

- Dr. Larry Keen, President, Fayetteville Technical Community College
- Dr. Frank Till, Superintendent, Cumberland County School System

**Cross Creek Early College Presentation**

- Briana Murrell, Student
- Lashay Hicks, Student
- Kurtys Neal, Student

### **Southeastern Region Business Panel**

- Moderator – Lt. Governor Walter Dalton
- Jeff Corbett, Senior Vice President, Progress Energy Delivery Carolinas
- Cheya Dunlap, Senior Vice President, Human Resources, GE Hitachi Nuclear Energy
- General David L. Grange, CEO, PPD, Inc.
- Merrideth Hale, Human Resources Director, Campbell Soup Company
- Jeanne Scharch, Director, Ft. Bragg Civilian Personnel Advisory Center
- Karen Wrigley, General Manager, DuPont Fayetteville Works Plant

### **Public Comments**

**March 8, 2010  
Greensboro, NC**

### **North Carolina's Piedmont Triad -Presentation of Vision Plan**

- Don Kirkman, President & CEO – NC's Piedmont Triad Partnership

### **Yadkin Valley Career Academy**

- Barry Sink, President - Olde Lexington Products
- Newell Clark, President - Standell Properties

### **Logistics & Distribution Cluster Breakdown**

- LB Clayton, VP Mid-South Region - Old Dominion & Chair of the Piedmont Triad Logistics and Distribution Roundtable

### **An Overview of Life Sciences, Bioscience & Regenerative Medicine**

- Dr. Richard H. Dean, President Emeritus - Wake Forest University Health Sciences

### **GTCC Middle College Student**

- Anna Batista, Anticipated May 2010 graduate from GTCC Middle College

### **A Perfect Match: Davie County and NC STEM**

- Dr. Linda Bost, Davie County Schools
- Terry Bralley, President, Davie County Economic Development Council
- Larry Colbourne, Mebane Charitable Foundation

### **The Emerging Field of Nanoscience**

- Dr. James Ryan, Founding Dean, Joint School of Nanoscience (NCA&T / UNC-G)

### **GTCC Middle College Graduate**

- Ryan Kabatchnick, 2005 GTCC Middle College graduate, 2010 NC State Graduate

### **Honda Aircraft Company & the Aerospace Industry**

- Stephen Keeney, Senior Manager of Corporate Affairs, Honda Aircraft Company

### **GTCC Middle College Graduate**

- Ronnie Mock, 2009 GTCC Middle College graduate, current NC A&T State University student

### **Public Comments**

**March 29, 2010  
Cary, NC**

**Research Triangle Region Vision Overview**

- Charles Hayes, President & CEO, Research Triangle Region

**State Priorities in Economic and Workforce Development**

- Secretary Keith Crisco, NC Department of Commerce

**STEM / Grand Challenges Early College High School Associated with NCSU**

- Dr. Betsy E. Brown, Vice Provost for Faculty Affairs, NC State University
- Horace McCormick Jr., Director, Talent Management, Progress Energy Human Resources
- Pamela B. Townsend, PE, Vice President, AECOM, Inc. & President, Professional Engineers of North Carolina

**Creativity & Workforce Competitiveness**

- David Burney, Partner and CEO, New Kind consulting firm

**Insights on Industry & Education**

- Dr. Teresa Helmlinger Ratcliff, Assistant Vice Chancellor for Extension, Engagement & Economic Development, North Carolina State University & Executive Director, Industrial Extension Service

**Apex High School Academy of Information Technology**

- Maite Ghazaleh, Academy Student, Class of 2011
- Caroline McCullen, Director, SAS Education Initiatives
- Julie Oster, Coordinator, Academy of Information Technology
- Cameron Will, Academy Student, Class of 2010

**Public Comments**

**April 18, 2009  
Asheville NC**

**Chancellor's Welcome and Introduction of Commission**

- Dr. Anne Ponder, Chancellor, University of North Carolina Asheville
- Lieutenant Governor Walter Dalton, Chair, JOBS Commission

**Advantage West Region Vision Overview**

- Scott Hamilton, President & CEO, AdvantageWest Region

**Panel Discussion, Work Force Development Needs of Targeted Sectors**

- Laura Copeland, VP Work Force Development and Public Policy, Asheville Area Chamber, Moderator
- Phil Webb, Human Resources Manager, Raflatac, Inc.
- Dan Ray, Past President and CEO, American Craft Council and creator of Handmade in America in Western North Carolina
- Troy Tolle, Co-founder and Chief Technical Officer, Digital Chalk
- Mark Burrows, Planning and Economic Development Director, Transylvania County
- Tim Johnston, President and CEO, Sisters of Mercy Urgent Care

**Buncombe County Early College High School Presentation**

- Margaret Turner, Principal, Buncombe County Early College
- Doug Hutchman, Work-based Counselor, Buncombe County Early College
- Drew Benbow, Student, Buncombe County Early College

- Joan Oriol, Western North Carolina Human Resource Agency

**Insights on Hospitality and Tourism Sectors**

- Paul Stone, President and CEO, North Carolina Lodging and Restaurant Association
- Stephen Frabitore, Tupelo Honey Café
- Capi Wampler, General Manager, The Ellington Hotel

**Joining Businesses and Schools in a Rural County**

- Dr. Patricia Mitchell, Director, Ashe County Economic Development

**A Future-Focused Work Force for Western North Carolina**

- Dr. John W. Bardo, Chancellor, Western Carolina University

**Public Comments**

**May 5, 2010  
Raleigh, NC**

Commission Discussion and Review of Draft Interim Report

## **2010 – 2011 Interim Meetings**

**September 1, 2010  
Raleigh, NC**

### **Opening Remarks**

- Lt. Governor Walter Dalton

### **Career Ready Commission**

- June Atkinson, Superintendent of Public Instruction

### **Short Session Overview**

- Kara McCraw, Committee Counsel

### **JOBS Pilot School Updates**

- Wake County / NC State University STEM Early College
  - Ruth Steidinger, Senior Director of Secondary Education, High Schools
  - Dr. Betsy Brown, Vice Provost for Faculty Affairs, North Carolina State University
- Cumberland County Language & Global Cultures Early College
  - Dr. Frank Till, Superintendent, Cumberland County Schools
  - Allison Violette, Assistant Superintendent, Cumberland County Schools
  - Ray Walters, Fayetteville Technical Community College
- Agri-science & Biotechnology Early College
  - Tony Habit, President, NC New Schools Project

### **NC STEM Community Collaborative**

- Karl Rectanus, NC STEM Community Collaborative Leader, NC STEM Community Collaborative

**October 12, 2010  
Fayetteville, NC**

### **National Efforts in Business/Education Collaboration**

- Rich Rosen, Corporate Vice-President for Education and Philanthropy, Battelle Memorial Institute

### **JOBS Pilot School Updates**

- Wake County / NC State University STEM Early College
  - Ruth Steidinger, Senior Director of Secondary Education, High Schools
- Cumberland County Language & Global Cultures Early College
  - Dr. Frank Till, Superintendent, Cumberland County Schools
- Agriscience & Biotechnology Early College
  - Dr. Dana Diesel Wallace, Vice-President for School Development, NC New Schools Project

### **Race to the Top Presentation**

- Dr. Bill Harrison, Chair, State Board of Education

### **Contemporary Science Center – A STEM Incubator School**

- Pamela Blizzard, Executive Director, Contemporary Science Center

### **City of Medicine Academy / Duke Medicine Prototype Update**

- Elizabeth Shearer, Principal, City of Medicine Academy
- Dr. Dana Diesel Wallace, Vice President for School Development, NC New Schools Project

### **Yadkin Valley Regional Career Academy**

- Barry Sink, President, Old Lexington Products
- Newell Clark, Principal, Standell Properties

### **Ft. Bragg Community Collaborative Update**

- Lynda Parlett, Director of Grants & Sponsored Programs, Robeson Community College
- Earl St. Julien Jones, Customer Service Specialist, DuPont
- Edgar Murphy, Consultant

**November 22, 2010**

**Raleigh, NC**

### **Early College Second Life Program**

- Dr. Austin Bunch, Associate Provost, East Carolina University
- Sharon Collins, Early College High School Program Director, East Carolina University
- Tom Vermillion, Co-Chair, Lenoir County STEM Collaborative
- Steve Hill, Co-Chair, Lenoir County STEM Collaborative
- Rita Spence, Project Coordinator, Lenoir County STEM Collaborative

### **Early College Updates**

- Wake County / NC State University STEM Early College
  - Rob Matheson, Principal, Wake County/NC State University STEM Early College
  - Ryan Haymore, Transition Counselor, Wake County/NC State University STEM Early College
- Cumberland International Studies Early College High School
  - Dr. Frank Till, Superintendent, Cumberland County Schools
- Agriscience & Biotechnology Study Commission
  - Dr. Marshall Stewart, Commission Chair

### **Governance Subcommittee Update**

- Grant Godwin, Subcommittee Chair

### **Hospitality & Tourism Steering Committee Update**

- Paul Stone, Executive Director, NC Hospitality Education Foundation

### **Business & Education Connectivity**

- Greg Gift, Assistant Director, Career and Technical Education, NC Department of Public Instruction
- Tom Haffner, President, P.T. International Corporation
- Tricia Willoughby, Executive Director, North Carolina Business Committee for Education

### **STEM Connectivity across North Carolina**

- Angela Quick, Deputy Chief Academic Officer, NC Department of Public Instruction
- Sam Houston, Co-Chair, NC STEM Collaborative Advisory Committee

**January 25, 2011**

**Raleigh, NC**

**Statewide STEM Initiative Update**

- Sam Houston and Pam Townsend, STEM Advisory Co-Chairs

**RTP STEM Incubator School Update**

- Pamela Blizzard, Executive Director, Contemporary Science Center

**JOBS Pilot Schools Update**

- Wake County / NC State University STEM Early College
  - Rob Matheson, Principal, Wake County/NC State STEM Early College
- Cumberland International Studies Early College High School
  - Dr. Frank Till, Superintendent – Cumberland County Schools

**Regional Agri-science & Biotechnology Study Commission**

- Dr. Marshall Stewart, Commission Chair

**Update - Career Academy 5 year conversation**

- Jimmy Chancey, Director, Career and Technical Education - CMS

**NC Rural Entrepreneurship through Action Learning (NCREAL)**

- Dr. Jim Owen, NC Board member and past president of Piedmont Community College
- Delores P. Ali, Marketing Education Consultant, NC Department of Public Instruction
- Arlene Childers, Assistant Director, NC REAL
- Dr. Eleanor Herndon, Interim Executive Director, NC REAL

**Finance / Banking Pilot Early College Update**

- Paul Stock, Executive Vice President & Counsel, NC Bankers Association

**NC Virtual Public Schools**

- Bryan Setser, Executive Director

**Institute for Emerging Issues Creativity Report**

- Anita Brown-Graham, Executive Director - IEI

**Report Overview & Discussion**

- Kara McCraw – Staff Attorney and Legislative Analyst
- Patsy Pierce – Legislative Analyst

